CONSTRUCTION AND VALIDATION OF PHYSICAL EDUCATION AND SPORTS PARTICIPATION QUESTIONNAIRE FOR CHILDREN.

SHORT SYNOPSIS

Submitted in partial fulfillment of the requirement of the degree of

DOCTOR OF PHILOSOPHY

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by

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Certificate

I hereby declare that the short synopsis **"Construction And Validation Of Physical Education And Sports Participation Questionnaire For Children"** being submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy in physical education under the department of physical education pedagogy of lakshmibai national institute of physical education, Gwalior during the academic year 2021.

It is a bonafide record of original work carried out under the supervision of Dr. Rahul Kanojiya and has not been submitted in full or part to any other university or institute for a degree or diploma. Further, it is certified that the short synopsis is plagiarism-free, and the proof has been submitted.

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CONTENT

S. No	Description	page no.
1	Introduction	1-4
2	Review of related literature	5-8
3	Objective of the study	8-9
4	Research methodology	10-11
5	Expected outcomes of the research	12
	References	13-14

Abstract

This study aims to create and validate a detailed questionnaire intended to evaluate the involvement of adolescents aged 13 to 18 in physical education and sports activities within the Fatehpur district of Uttar Pradesh, India. Acknowledging the vital importance of physical activity for enhancing children's physical, mental, and social health, the research will concentrate on pinpointing significant influencing factors such as infrastructure, health systems, academic curricula, misconceptions, and various other elements. The questionnaire will be developed in several stages, starting with open-ended questions to elicit response themes, followed by expert review and content validation through Lawshe's Content Validity Ratio. The completed instrument will consist of 50 closed-ended questions organized into five domains, utilizing a three-point Likert-type response scale: "Yes," "No," and "Maybe." A pilot study will be carried out to evaluate the clarity and relevance of the items, after which Exploratory and Confirmatory Factor Analyses (EFA and CFA) will be employed to confirm construct validity and model fit. Internal consistency will be assessed using Cronbach's Alpha along with other statistical reliability measures. The survey tool is anticipated to be applicable to a wide range of student populations across different types of schools. Following successful validation, this instrument will provide a significant resource for educators, policymakers, coaches, researchers, and other stakeholders interested in assessing and enhancing youth participation in physical education and sports. The results may assist in identifying obstacles and enablers of participation and will aid in the development of more inclusive and effective school-based physical activity initiatives in the future.

Keywords: Physical Education, Sports Participation, Questionnaire Development, Validation, Adolescents

INTRODUCTION

The health enhancing properties of physical activity are evidence-based and widely accepted. Physical activity is any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure. It includes active living, active play, sport, physical education and active transport. Physical activity is important to children's current and future health, and adherence to the physical activity guidelines produces a range of direct and indirect benefits. It assists in the control of body weight by increasing energy expenditure, this is important in teaching children and young people how to achieve a healthy 'energy balance' and avoid developing adult obesity. It reduces the risk of developing premature cardiovascular disease, type-2 diabetes, metabolic syndrome, and some site-specific cancers. Weight bearing physical activity is important in bone formation and re-modelling. In addition, physical activity reduces depression and anxiety (especially in shy children), enhances mood, self-esteem, and quality of life. Participation in regular health enhancing physical activity has also been found to reduce rule-breaking behavior, and to improve attention span and classroom behavior. It has positive effects on academic performance, including achievement in math tests and reading, academic grades and perceptual skills. Involvement in sport and physical education can play a significant role in the enrichment of a child's social life and the development of social interaction skills. Childhood provides a great opportunity to influence attitudes and participation levels positively towards physical activity. A child who emerges from school with confidence in their physical body and skills and who has been exposed to positive experiences in physical activity is more likely to adhere to an active lifestyle as they age.

Statement Of Problems

This study aims to **"construct and validate of physical education and sports participation questionnaire for children".**

Purpose Of The Study

The primary Purpose of this study on the light of past research will be to develop and validate a questionnaire for children to assess their participation in physical education and sports activities. This instrument will evaluate aspects such as infrastructure, health systems, academic curriculum, misconceptions, and miscellaneous factors related to physical activities.

Delimitations

- This study will be delimited to the target population, focusing exclusively on adolescents aged 13–18 years.
- The study will be delimited to the geographical area, confined to selected educational institutions within the district of Fatehpur, state of Uttar Pradesh, India.
- The study will be delimited to the data collection instrument, utilizing a hybrid online and offline questionnaire as the sole data collection method.
- The study will be delimited to the content scope, assessing participation in physical education (PE) classes and organized sports but excluding nonstructured physical activities such as unstructured play or domestic tasks.
- The study will be delimited to validation methods, employing expert evaluation, pilot testing, and statistical validation while excluding advanced psychometric techniques.

Limitations

- Self-Reported Data – This study will rely on children's self-reported responses, which will be subject to social desirability bias or inaccurate recall regarding their participation in physical activities.

- Limited Generalizability – The questionnaire will be administered to a specific age group (13-18 years) and within a particular geographic region, potentially limiting its applicability to other populations.
- Exclusion of Certain Physical Activities – The study will focus on schoolbased physical education and organized sports, potentially overlooking informal physical activities such as unstructured play or home-based exercise.
- Time Constraints – The study will be conducted within a limited timeframe, which will preclude the long-term assessment of children's participation patterns in sports and physical education.
- Potential Response Bias – Younger children (ages 13-18) may experience difficulty comprehending certain questionnaire items, potentially leading to misinterpretation or inaccurate responses.

Research Questions

- What key elements and frameworks will be included in a questionnaire on physical education and sports involvement for young students?
- How will a questionnaire be designed to ensure that it is easy to understand, age-appropriate, and clear for children?
- What statistical techniques (e.g., Cronbach's Alpha, Exploratory Factor Analysis) will be used to measure the survey's reliability and internal consistency?
- How will the survey perform in terms of validity and reliability across different demographic groups (e.g., age, gender, and school type)?
- Considering the time limitations and children's comprehension abilities, how feasible will it be to administer the survey in school environments?
- What will be the potential cultural and contextual obstacles to using surveys across various school settings and geographic areas?
- How can the survey be improved for future use in extensive studies on children's participation in physical education and sports activities?

Definition And Explanation Of Key Terms

Construction

The creation of an abstract entity.

Questionnaire

A set of printed or written questions with a choice of answers, devised for the purposes of a survey or statistical study.

Factors

A circumstance, fact, or influence that contributes to a result.

Influencing

The capacity or power of persons or things to be a compelling force on or produce effects on the actions, behavior, opinions, etc., of others.

Physical Activity

Any bodily movement that's required energy expenditures including during leisure time, or games and sports participation.

Participation

The action of taking part in something.

Scope Of Study

This study and questionnaire will be useful for policymakers, school administrations, Researchers, Sports psychologists, Coaches, Players, Sports trainers, selectors, and physical education teachers.

Review Of The Related Literature

A careful review and exploration of the literature related to the present study will be essential to have insight into the research already carried out in this field. To provide the background materials for this study, the scholar had tried to go through the related literature, a brief review of which are presented in this chapter.

Stuart J. Fairclough[1], studied associations between socioeconomic status (SES), weight status, and sex, with children's participation in sedentary behaviors and sport. Methods. Children (aged 9–10 years; n = 6 337) completed a questionnaire to establish how long they spent in sedentary behaviors and sport participation during weekdays and weekend days. Height and weight were measured to calculate body mass index. Associations between dependent and independent variables were investigated using hierarchical loglinear analysis.

Results. A significantly greater proportion of boys than girls spent ≥ 1 h per weekday and weekend day watching television (TV) ($p < 0.001$), playing video games ($p < 0.001$), and participating in sport ($p < 0.001$). TV viewing and video gaming for ≥ 1 h per day were inversely associated with SES ($p = 0.001$), whilst the greatest proportion of children participating in sport for ≥ 1 h were in the highest SES quartile ($p < 0.001$). Overweight girls were more likely than normal weight girls to use the internet for ≥ 1 h per weekend day ($p < 0.001$). Conclusions. Relatively more lower SES children spent time in sedentary behaviors than sport participation. Weight status was not consistently associated with sedentary behaviors. Proportionately more boys than girls watched TV, played video games, and participated in sport, suggesting that boys

find time for sedentary behaviors and physical activity. Efforts should be made to address inequalities in the prevalence of sedentary behaviors and sport participation for all children regardless of SES, weight status, or sex.

Wang Jin[2], studied the motives of young athletes in spare time sport schools with those in regular schools in China were compared through the modification of the Participation

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[1] *Stuart J. Fairclough,Lynne M. Boddy,Allan F. Hackett &Gareth Stratton* "**Associations between children's socioeconomic status, weight status, and sex, with screen-based sedentary behaviours and sport participation"** Pages 299-305 | Received 09 Jul 2008, Published online: 18 Nov 2009

[2] *Wang Jin ; Wiese-Bjornstal, D. M.* **"The relationship of school type and gender to motives for sport participation among youth in the People's Republic of China"** Department of

Motivation Inventory scale. 465 youth aged between the ages of 7 and 17 years (including 257 regular school students and 208 spare-time students) were asked to rank each of the following participation motives: competence/competition, fun/excitement, team orientation, fitness, energy release, social activity, friendship, future career paths, family influence and achievement/rewards. Fun, fitness, competence, and social motives were found to be the most common motivations for participation. Factors of competence/competition, energy release, family influence, and achievement rewards were more crucial motivations for sport school students, while regular school students gave significantly higher scores to the factors of team orientation and social activity. These findings are quite logical given the hierarchical structure of the sport schools necessitating a focus on competence/competition and achievement/rewards to move up the levels of the school. It also explains the one culturally unique motivational factor for sports participation, encompassing the idea of getting into a better school as well as future careers specifically in sport and/or physical education.

Brenda Jo Bredemeier[3] studied the relationships between sport involvement variables (participation and interest) and facets of children's morality (reasoning maturity and aggression tendencies) were investigated for 106 girls and boys in grades 4 through 7. Children responded to a sport

involvement questionnaire, participated in a moral interview, and completed two self-report instruments designed to assess aggression tendencies in sport- specific and daily life contexts. Analyses revealed that boys' participation and interest in high contact sports and girls' participation in medium contact sports (the highest level of contact sport experience they reported) were positively correlated with less mature moral reasoning and greater tendencies to aggress. Regression analyses demonstrated that sport interest predicted reasoning maturity and aggression tendencies better than sport participation. Results and implications are discussed from a structural developmental perspective.

Physical Education, Rockford College, Rockford, USA. Journal article : International Journal of Sport Psychology 1997 Vol.28 No.1 pp.13-24 ref.12

[3] *Brenda Jo Bredemeier, David L. Shields , Maureen R. Weiss , Brace A.B. Cooper* **Family influences on children's sport and physical activity participation, behavior, and psychosocial responses and Relationship of Sport Involvement with Children's Moral Reasoning and Aggression Tendencies**

[4]This exploratory study examined the relationships between pre- and postinjury sport participation among active individuals with spinal cord injury (SCI) in the United Kingdom. Factors that influence individuals with SCI into sport were identified. METHODS: A total of 143 British individuals with SCI currently participating in wheelchair basketball, wheelchair rugby, wheelchair tennis, and wheelchair athletics were recruited. A total of 112 subjects were active prelesion, and 31 subjects were inactive preinjury. A Disability Sport Participation questionnaire developed by the authors was used for data collection. The questionnaire was distributed through the British Wheelchair Sport Associations. Personal, impairment, health and fitness, socialization, and participation data of athletes with SCI were collected. Groups of active preinjury and inactive preinjury were compared. RESULTS: For athletes who had been active pre-SCI, the in-hospital rehabilitation program and specialized sport club for people with disabilities were more important contexts for introducing the sport after injury to individuals. Friends and peers with disabilities were much more influential as initial and continuing socialization agents than rehabilitation therapists. The main reasons for athletes with SCI who participated in sports after injury were for fitness, fun, health, and competition, although many athletes noted that social aspects and rehabilitation also influenced their sport participation. CONCLUSION: This study identified

social contexts, social agents, difficulties, sources of information, and reasons for sport participation of athletes with SCI. The results may offer some directions for the improvement of rehabilitation programs for people with SCI and also help the development of appropriate strategies to encourage people with SCI to participate in sports and leisure activities.

Background Regular physical activity may have psychological benefits. Our study assessed the association between extent of participation in regular sport or vigorous recreational activity and emotional wellbeing in adolescents aged 16 years. Methods Data were collected from a cohort of adolescents, born between April 5 and April 11, 1970, in England, Scotland, and Wales, who took part in the follow-up assessment at age 16 years. Emotional wellbeing was assessed by the general health questionnaire (GHQ) and the malaise inventory (divided into psychological and somatic subscales). Information was obtained about participation in ten team and 25 individual sports and vigorous recreational activities during the previous year. Non-vigorous recreations, such as darts and snooker, were assessed separately. Social class and health status (recent illness and use of hospital services) were included in our analyses as

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[4] Factors influencing sport participation among athletes with spinal cord injury.(*PMID:11224802)*

possible confounding factors. 2223 boys and 2838 girls with a mean age of 16·3 years (SD 0·38) were included in our analysis. Statistical analysis was by multiple linear and logistic regression.

Findings The sport and vigorous recreational activity index was positively associated with emotional wellbeing independently of sex, social class, health status, and use of hospital services.

Objective Of The Study

The primary objective of this study is to develop and validate a questionnaire for children to assess their participation in physical education and sports activities. This instrument evaluates aspects such as Infrastructure, Health system, academic curriculum, misconceptions, and Miscellaneous factors related to physical activities.

The specific objectives are to:

1. **Develop a structured, closed-ended survey instrument** that accurately measures participation in physical education and sports among school students in Fatehpur, Uttar Pradesh, India.
2. **The questionnaire** will be validated through expert review and statistical analysis.
3. **The reliability of the survey will be established** using the appropriate testing methodologies.
4. **Assess the clarity and relevance of the questionnaire items** for students aged 13–18 years.
5. **Ensure the survey is applicable** to diverse student populations across various school types, including government, government-aided, and self-financed institutions affiliated with different educational boards.

6. **Develop a standardized instrument** that can be utilized by educators, coaches, and researchers to evaluate children's engagement in physical education and sports activities.

Research Methodology

Selection Of Subjects

1000 students as subjects will be selected, having the age limit 13 to 18 years, from middle schools of Fatehpur, Uttar Pradesh. Half male and half female subjects will be selected as a subjects for this study.

Construction Of Questionnaire

The questionnaire will be prepared with great care and in consultation with guide and other logical experts in field of Physical Education, especially Sports Psychology. Taking into consideration the maximum coverage of the area, great attention will be paid to all relevant aspects of the study, so as to get maximum worthwhile and meaningful responses from the subjects.

Further the construction and the arrangement of the questions will be made in a logical way so that the sequence in the response statements would be readily available in an orderly manner. Attempts will be made to make the questions simple, clear and relevant, leaving no room for ambiguity of vagueness.

The questionnaire will be made of 50 items: 10 items in "**Infrastructure"**, 10 items in "**Health Issues"**, 10 items in **"Academic Curriculum"**, 10 items in **"Misconception"** and 10 items in **"Miscellaneous".**

Subjects will be required to respond to this entire questionnaire in "**YES"** , "**NO", and "May Be"**

Development Of Questionnaire & Statistical Procedure

The following procedure will be adopted for the development of the questionnaire.

First Phase

- Open-ended questions will be used to elicit Physical Education and sports participation.
- Student responses regarding Physical Education and sports participation will be identified to form the modal Physical Education and sports participation.
- Closed-ended items will be selected based on the frequency of modal Physical Education and sports participation.

Second Phase

- Experts will evaluate the closed-ended items.
- Content validity will be established by using Lawshe's content validity ratio.

Third Phase

- A pilot study will be conducted with the closed-ended items that have proven content validity.
- The factor model will be determined.

Fourth Phase

- A main study will be conducted with the retained closed-ended items after exploratory factor analysis.
- The factor model will be confirmed, and model fit indices will be checked for construct validity. If the model fit is not satisfactory, the main study data will be split into two: the first half of the data will be used for EFA, and the second half for CFA.
- Composite or construct reliability will be assessed along with checking discriminant and convergent validity with respect to the rotation used.

Fifth Phase

- The validated questionnaire or instrument will be considered in total attitude scores.
- The validated questionnaire or instrument will be considered in sub scores.

Expected Outcomes Of The Results

Physical Education And Sports Participation Qustionnaire For Childrens Will Be Constructed And Validated.

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